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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 11-12,22-23 and 26-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
2. In regard to Claims 11-12,22-23 and 26-27 contain the trademark/trade names IrDA and Bluetooth. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See Ex parte Simpson, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe program code and, accordingly, the identification/description is indefinite. For example and without limitation, the trademark Bluetooth and IrDA comprises a suite of products, applications, versions, drivers and software plug-ins and the Examiner cannot determine from the claim limitations the scope of the claim when a trademark is claimed since claiming the trademark comprises an array of products and services.

<http://en.wikipedia.org/wiki/Irda>

<http://en.wikipedia.org/wiki/Bluetooth>

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claim 28 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claimed invention does not fall within at least one of the four categories of patent eligible subject matter recited in 35 U.S.C. 101 (process, machine, manufacture, or composition of matter) as disclosed in the specification on page 90, "... a carrier medium. Suitable carrier media include a memory medium as described above..." Signals carrying and storing instructions or other functional descriptive material or a computer program per se is not included in one of the statutory categories of invention, more information about this matter is covered in the Annex IV of the Interim Guidelines for Subject matter Eligibility. The following link on the World Wide Web is for the United States Patent And Trademark office (USPTO) policy on 35 U.S.C. §101

http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf

Claim Rejections - 35 USC § 102

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5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1,8,13,16,18-19 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Kodosky (6,173,438 B1).

As for independent claims 1 and 28, Kodosky teaches a computer-implemented method and corresponding medium for programming an embedded device, the method comprising, creating a graphical program, wherein the graphical program specifies a function to be performed by the embedded device; storing the graphical program on a mobile computer; and transmitting the graphical program from the mobile computer to the embedded device over a serial link; wherein after said transmitting, the embedded device is operable to execute the graphical program to perform the specified function (figure 6-9 and col.14, lines 58-67 and col.16, lines 45, 47, 53-55).

As for dependent claim 8, Kodosky teaches the method of claim 1, wherein the serial link comprises a serial cable (col.8, line 4).

As for dependent claim 13, Kodosky teaches the method of claim 1, further comprising, analyzing the graphical program for function dependencies to generate required modules; analyzing the graphical program to determine an execution sequence; and

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generating a flatfile based on the required modules and execution sequence, wherein the flatfile contains the functionality of the graphical program (figure 6).

As for dependent claim 16, Kodosky teaches the method of claim 1, further comprising, the embedded device executing the graphical program to perform the function (figure 11).

As for dependent claim 18, Kodosky teaches the method of claim 17, wherein the embedded device sending the data to the mobile computer; and the mobile computer displaying the data are performed using a Front Panel Protocol (figure 9).

As for dependent claim 19, Kodosky teaches the method of claim 17, wherein said sending the data to the mobile computer comprises sending the data to the mobile computer over a serial cable (note the analysis of claim 8).

Claim Rejections - 35 USC § 102/103

7a. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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7b. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 2-7,9-12,14-15,17,20-27 and 29-30 are rejected under 35 U.S.C. 102(b) as anticipated by Kodosky (US 6,173,438 B1) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kodosky (US 6,173,438 B1).

As for dependent claim 2, Kodosky teaches the method of claim 1, wherein the embedded device comprises a sensor interface (figure 3A and col.11, line 60). Kodosky does not literally use the words "sensor interface", "sensors". It would have been

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obvious to one of ordinary skill in the art at the time of the invention that DAQ Logic includes sensors, sensor interface, and the like (col.23, lines 16-22).

<http://en.wikipedia.org/wiki/DAQ>

As for dependent claim 3, Kodosky teaches the method of claim 2, wherein the sensor interface is coupled to one or more sensors (figure 3A and col.11, line 60; note the analysis of claim 2).

As for dependent claim 4, Kodosky teaches the method of claim 2. Kodosky does not specifically mention wherein the sensor interface comprises a compact sensor interface between approximately 3 cm.times.3 cm and approximately 6 cm.times.6 cm. Kodosky does not exactly mention a size. However it would have been obvious to one of ordinary skill in the art to achieve any desired size of a compact sensor interface (col.23, lines 16-22).

As for dependent claim 5, Kodosky teaches the method of claim 2, wherein the sensor interface includes one or more sensors (figure 3A and col.11, line 60; note the analysis of claim 2 above).

As for dependent claim 6, Kodosky teaches the method of claim 1. Kodosky does not expressly mention wherein said creating the graphical program is performed on the mobile computer. Kodosky mentions working on a computer but does not expressly

mention it being a mobile computer; it would have been obvious to one of ordinary skill in the art at the time of the invention to realize the portability to any computing environment (col.7-8 and col.23, lines 16-22).

As for dependent claim 7, Kodosky teaches the method of claim 1, wherein the mobile computer comprises a Personal Digital Assistant (PDA) (note the analysis of claim 6).

As for dependent claim 9, Kodosky teaches the method of claim 1. Kodosky does not expressly mention wherein the serial link comprises a wireless serial link; however it would have been obvious at the time of the invention to implement common practice serial implantations such as wireless, 802.11a,b, g, n, infrared serial link etc. (col.23, lines 16-23 and col.8, lines 1-15).

As for dependent claim 10, Kodosky teaches the method of claim 9, wherein the wireless serial link comprises an infrared serial link (note the analysis of claim 9).

As for dependent claim 11, Kodosky teaches the method of claim 10, wherein the infrared serial link comprises an IrDA serial link (note the analysis of claim 9).

As for dependent claim 12, Kodosky teaches the method of claim 9, wherein the wireless serial link comprises a Bluetooth serial link or an 802.11 serial link (note the analysis of claim 9).

As for dependent claim 14, Kodosky teaches the method of claim 13, wherein said transmitting the graphical program from the mobile computer to the embedded device over a serial link comprises, transmitting the flatfile to the embedded device over the serial link (note the analysis of claim 9 and figure 7).

As for dependent claim 15, Kodosky teaches the method of claim 14, further comprising, the embedded device processing the flatfile to generate an executable, wherein, in the embedded device being operable to execute the graphical program to perform the specified function, the embedded device is operable to execute the executable to perform the specified function (figure 11).

As for dependent claim 17, Kodosky teaches the method of claim 16, wherein the embedded device executing the graphical program generates data, the method further comprising, the embedded device sending the data to the mobile computer; and the mobile computer displaying the data (note the analysis of claim 6).

As for dependent claim 20, Kodosky teaches the method of claim 17, wherein sending the data to the mobile computer comprises sending the data to the mobile computer over a wireless serial link (note the analysis of claim 9).

As for dependent claim 21, Kodosky teaches the method of claim 20, wherein the

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wireless serial link comprises an infrared serial link (note the analysis of claim 9).

As for dependent claim 22, Kodosky teaches the method of claim 10, wherein the infrared serial link comprises an IrDA serial link (note the analysis of claim 9).

As for dependent claim 23, Kodosky teaches the method of claim 9, wherein the wireless serial link comprises a Bluetooth serial link or an 802.11 serial link (note the analysis of claim 9).

As for dependent claim 24, Kodosky teaches the method of claim 16, wherein the embedded device executing the graphical program generates data, the method further comprising, executing a different graphical program on the mobile computer, wherein said executing the different graphical program comprises, performing a discovery operation to detect and establish communications with the embedded device; retrieving the data from the embedded device via a wireless serial transmission medium; and displaying the data on the mobile computer (note the analysis of claim 1-23 above).

As for dependent claim 25, Kodosky teaches the method of claim 24, wherein the wireless serial transmission medium comprises an infrared serial link (note the analysis of claim 9).

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As for dependent claim 26, Kodosky teaches the method of claim 10, wherein the infrared serial link comprises an IrDA serial link (note the analysis of claim 9).

As for dependent claim 27, Kodosky teaches the method of claim 9, wherein the wireless serial link comprises a Bluetooth serial link or an 802.11 serial link (note the analysis of claim 9).

As for dependent claim 29, Kodosky teaches a system for programming an embedded device, the system comprising, a mobile computer system, comprising, a processor; a memory medium coupled to the processor, wherein the memory medium stores the program and a plurality of components of a program execution system, wherein the memory medium also stores program instructions executable to analyze the program to determine a subset of the plurality of components required for execution of the program; and a display coupled to the processor and memory medium; and an embedded device coupled to the computer system via a serial transmission medium, wherein the embedded device comprises, a processor; and a memory medium coupled to the processor, wherein the memory medium stores a minimal execution system; wherein the memory medium of the mobile computer system further stores program instructions which are executable by the processor of the computer system to, transmit the program and the subset of the plurality of components to the embedded device over the serial transmission medium (note the analysis of claim 2); wherein the minimal execution system is executable by the processor of the embedded device to execute the program

using the subset of the plurality of components; and wherein the mobile computer is operable to receive data from the embedded device and display the data on the display (note the analysis of claims 1-28 above).

As for independent claim 30, Kodosky teaches a hand-held computer, comprising: a processor; a memory medium coupled to the processor, wherein the memory medium stores a graphical program, wherein the graphical program specifies a function to be performed by a sensor interface device; and a display coupled to the processor and memory medium; wherein the memory medium further stores program instructions which are executable by the processor to: analyze the graphical program; convert the graphical program into a format suitable for transmission over a serial link to the sensor interface device (note the analysis of claim 2 above); and transmit the converted graphical program from the hand-held computer to the sensor interface device over the serial link; wherein after said transmitting, the sensor interface device is operable to execute the converted graphical program to perform the specified function; and wherein the memory medium further stores program instructions which are executable by the processor to: receive data from sensor interface device during execution of the converted graphical program; and display the received data on the display (not the analysis of claims 1-28 above).

It is noted that any citation to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any

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way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Prior art cited relates to system and methods of creation of a graphical program on a computing environment such as a PDA with embedded devices.

Inquires

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Augustine whose telephone number is 571-270-1056. The examiner can normally be reached on Monday - Friday: 7:30- 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

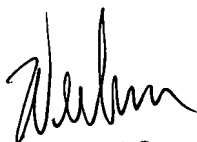
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Nicholas Augustine
Examiner
AU: 2179

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June 23, 2007



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